

U.S. Patent Application Serial No. 10/517,765
Reply to OA dated December 1, 2008

REMARKS

Claim 9 is amended to clarify the present invention. New Claims 19-29 are added. It is respectfully submitted that no new matter is involved. Claims 1-8 and 10-18 are cancelled without prejudice or disclaimer. It is believed that this amendment is fully responsive to the Office Action mailed on December 1, 2009.

In the Final Office Action, Claims 1-18 were rejected under 35 U.S.C. 103(a) as obvious over UL VAC, Japan Ltd. (JP 7-109574) in view of Moriya et al. (U.S. 6,872,636). Reconsideration and removal of this rejection are respectfully requested in view of the present amendment to Claim 9 and the following remarks.

In Claim 9, the extension quantity of the receiving section is 6 mm or more, so the particle increase can be reduced to approximately 20 or fewer particles (practical usage level). The increase in particles will exceed 20 particles if the receiving section extension quantity is less than 6 mm. If the receiving section extension quantity is set, for example to 2 mm, then the particle increase will be 45 particles (at least double the number of particles than at 6 mm extension); if the receiving section extension quantity is set to 0 mm, then the particle increase will be 133 particles (6 times or more the number of particles than at 6 mm extension).

The present inventors found that setting the receiving section extension quantity to 6 mm or more can drastically lower an increase in the number of particles and attain a practical usage level.

At the receiving section extension quantity of 15 mm, the particle reduction effect is

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saturated. In other words, there is no further change in the particle reduction effect even if the extension quantity is further increased. Setting the receiving section extension quantity between 6 mm and 15 mm in Claim 19, allows for a drastic reduction in particle increase and also avoids the need to enlarge the receiving section or, in other words, the substrate support member.

By setting the receiving section extension quantity to 10 mm or more, the invention of Claim 20 can reduce the particle increase to approximately 10 particles or less ($\frac{1}{2}$ or less than the number of particles than at 6 mm extension).

By setting the receiving section extension quantity between 10 mm and 15 mm, the invention of Claim 21 can reduce the particle increase to approximately 10 particles or less, and also avoid the need to enlarge the receiving section or, in other words, the substrate support member.

Regarding the cited references, it is respectfully submitted that ULVAC fails to disclose or suggest the "receiving section extension quantity of 6 mm or more", as now in present Claim 9.

It is respectfully submitted that Moriya et al. does not employ a structure where "the receiving section extends outwards 6 mm or more from a section of the outer periphery of the support section" as described in Claim 9. In Moriya et al. multiple grooves are formed on each of the four support rods (11), one ring (12) is mounted on each groove, and three pins (13) which contact the wafer (8) are mounted on that one ring (12). In other words, the support structure utilized by Moriya et al. is completely different from that of Claim 9. In the support structure utilized by Moriya et al., there are no receiving sections formed in each support groove as described in Claim 9, so the dropping of particles caused by abrasion between the ring (12) and the grooves of support

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rods (11) cannot be prevented. Moreover, the dropping of particles caused by abrasion between the wafer (8) and the pins (13) cannot be prevented.

With regard to new Claims 24 and 27, it is respectfully submitted that neither ULVAC nor Moriya et al. disclose or suggest the invention of new Claims 24 and 27. The support structure utilized by ULVAC and Moriya et al. is completely different from that of Claims 24 and 27.

Support for the new claims can be found on page 9, line 20 to page 10, line 4; page 21, line 8 to page 22, line 3; page 25, line 14 to page 26, line 9; page 26, line 25 to page 29, line 7 and FIGS. 7, 9, 10, 11(b), 12(a) and 12(b) of the present specification.

In view of the amendment to Claim 1, and the above remarks, removal of this rejection is respectfully requested.

In view of the aforementioned amendments and accompanying remarks, Claims 9 and 19-29, as amended, are believed to be patentable and in condition for allowance, which action, at an early date, is requested.

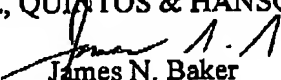
If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the Applicants undersigned agent at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

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In the event that this paper is not timely filed, the Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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Enclosure: Petition for Extension of Time